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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/028,416	12/21/2001	Simon Cawley	3439	3577

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EXAMINER

MARTINELL, JAMES

ART UNIT	PAPER NUMBER
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1634

DATE MAILED: 09/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.



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APPLICATION NO./ CONTROL NO.	FILING DATE	FIRST NAMED INVENTOR / PATENT IN REEXAMINATION	ATTORNEY DOCKET NO.
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EXAMINER
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ART UNIT	PAPER
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20050829

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Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner for Patents

  
James Martinell  
Primary Examiner  
Art Unit: 1634  
8/29/05

The reply filed on June 15, 2005 is not fully responsive to the prior Office Action because of the following omission(s) or matter(s). A large number of un-noted changes exist between the amendment filed June 21, 2005 and the originally filed claims of December 21, 2001 (the current active copy of the claims). The un-noted changes occur in at least the following locations.

- (a) Claim 1: "end" in "5' end" was added but not underlined.
- (b) Claim 1: "beginning" was deleted but not indicated by a strikethrough.
- (c) Claim 2: "end" in "5' end" was added but not underlined.
- (d) Claim 2: "beginning" was deleted but not indicated by a strikethrough.
- (e) Claim 3: "rich" in "adenine rich" was added but not underlined.
- (f) Claim 3: "thymine rich region" was changed to "thymine region" but not indicated by a strikethrough.
- (g) Claim 4: "thymine rich region" was changed to "thymine region" but not indicated by a strikethrough.
- (h) Claim 5: "thymine rich region" was changed to "thymine region" but not indicated by a strikethrough.
- (i) Claim 6: "thymine rich region" was changed to "thymine region" but not indicated by a strikethrough.
- (j) Claim 7: "rich" in "adenine rich" was added but not underlined.
- (k) Claim 8: "of" in "5' of" was added but not underlined.
- (l) Claim 8: "site" was added to the end of the claim but not underlined.
- (m) Claim 9: " $\Pr(h=k|x)$ " was changed to " $\Pr(h=k/x)$ " without underlining.
- (n) Claim 10: " $\Pr(h=k|x)$ " was changed to " $\Pr(h=k/x)$ " without underlining.
- (o) Claim 10: " $\Pr(x|h=k)$ " was changed to " $\Pr(x/h=k)$ " without underlining.
- (p) Claim 11: " $\Pr(h=k|x)$ " was changed to " $\Pr(h=k/x)$ " without underlining.
- (q) Claim 11: " $\Pr(x_{k-5}, \dots, x_k|h=k)$ " was changed to " $\Pr(x_{k-5}, \dots, x_k/h=k)$ " without underlining.

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- (r) Claim 11: " $\Pr(x_{k-5}, \dots, x_k | h=k)$ " was changed to " $\Pr(x_{k-5}, \dots, x_k / h=k)$ " without underlining.
- (s) Claim 11: "at position k" was changed to "at the position k" without underlining.
- (t) Claim 11: " $\Pr(x_{k-5}, \dots, x_k | h=k)$ " was changed to " $\Pr(x_{k-5}, \dots, x_k / h=k)$ " without underlining.
- (u) Claim 11: " $\Pr(x_{k-5}, \dots, x_k | h \neq k)$ " was changed to " $\Pr(x_{k-5}, \dots, x_k / h=k)$ " without underlining.
- (v) Claim 11: "observing the hexamer given" was changed to "observing the hexamer" without a strikethrough.
- (w) Claim 11: in the last line, "a" was changed to "the" without a strikethrough or underlining.
- (x) Claim 13: " $\Pr(x_{k-5}, \dots, x_k | h \neq k)$ " was changed to " $\Pr(x_{k-5}, \dots, x_k / h=k)$ " without underlining.
- (y) Claim 13: "a" was changed to "the" without a strikethrough or underlining.
- (z) Claim 13: "order" was deleted without a strikethrough.
- (aa) Claim 14: " $\Pr(x_{k-5}, \dots, x_k | h \neq k) = \Pr(x_{k-5})\Pr(x_{k-4} | x_{k-5})\Pr(x_{k-3} | x_{k-5}, x_{k-4})\Pr(x_{k-2} | x_{k-4}, x_{k-3})\Pr(x_{k-1} | x_{k-3}, x_{k-2})\Pr(x_k | x_{k-2}, x_{k-1})$ " was changed to " $\Pr(x_{k-5}, \dots, x_k / h \neq k) = \Pr(x_{k-5})\Pr(x_{k-4} / x_{k-5})\Pr(x_{k-3} / x_{k-5}, x_{k-4})\Pr(x_{k-2} / x_{k-4}, x_{k-3})\Pr(x_{k-1} / x_{k-3}, x_{k-2})\Pr(x_k / x_{k-2}, x_{k-1})$ " without underlining.
- (bb) Claim 14: "second-order" was changed to "second order" without strikethrough.
- (cc) Claim 15: "UTR" was changed to "UTRs" without underlining.
- (dd) Claim 16: "zero-order" was changed to "zero order" without a strikethrough.
- (ee) Claim 17: "end" in "5' end" was added but not underlined.
- (ff) Claim 17: "beginning" was deleted but not indicated by a strikethrough.
- (gg) Claim 18: "end" in "5' end" was added but not underlined.
- (hh) Claim 18: "beginning" was deleted but not indicated by a strikethrough.

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- (ii) Claim 19: "thymine rich region" was changed to "thymine region" but not indicated by a strikethrough.
- (jj) Claim 20: "thymine rich region" was changed to "thymine region" but not indicated by a strikethrough.
- (kk) Claim 21: "thymine rich region" was changed to "thymine region" but not indicated by a strikethrough.
- (ll) Claim 22: "thymine rich region" was changed to "thymine region" but not indicated by a strikethrough.
- (mm) Claim 23: "rich" in "adenine rich" was added but not underlined.
- (nn) Claim 24: "of" in "5' of" was added but not underlined.
- (oo) Claim 25: " $\Pr(h=k|x)$ " was changed to " $\Pr(h=k/x)$ " without underlining.
- (pp) Claim 26: "computer readable medium of Claim 25" was changed to "method according to claim 25" without strikethrough or underlining.
- (qq) Claim 27: " $\Pr(h=k|x)$ " was changed to " $\Pr(h=k/x)$ " without underlining.
- (rr) Claim 27: " $\Pr(x_{k-5}, \dots, x_k|h=k)$ " was changed to " $\Pr(x_{k-5}, \dots, x_k/h=k)$ " without underlining.
- (ss) Claim 27: " $\Pr(x_{k-5}, \dots, x_k|h=k)$ " was changed to " $\Pr(x_{k-5}, \dots, x_k/h=k)$ " without underlining.
- (tt) Claim 27: "at position k" was changed to "at the position k" without underlining.
- (uu) Claim 27: "observing the hexamer given" was changed to "observing the hexamer" without a strikethrough.
- (vv) Claim 27: "a" was changed to "the" without a strikethrough or underlining.
- (ww) Claim 29: " $\Pr(x_{k-5}, \dots, x_k|h=k)$ " was changed to " $\Pr(x_{k-5}, \dots, x_k/h=k)$ " without underlining.
- (xx) Claim 29: "a" was changed to "the" without a strikethrough or underlining.
- (yy) Claim 29: "order" was deleted without a strikethrough.

- (zz) Claim 30: " $\Pr(x_{k-5}, \dots, x_k | h \neq k) = \Pr(x_{k-5})\Pr(x_{k-4} | x_{k-5})\Pr(x_{k-3} | x_{k-5}, x_{k-4})\Pr(x_{k-2} | x_{k-4}, x_{k-3})\Pr(x_{k-1} | x_{k-3}, x_{k-2})\Pr(x_k | x_{k-2}, x_{k-1})$ " was changed to " $\Pr(x_{k-5}, \dots, x_k / h \neq k) = \Pr(x_{k-5})\Pr(x_{k-4} / x_{k-5})\Pr(x_{k-3} / x_{k-5}, x_{k-4})\Pr(x_{k-2} / x_{k-4}, x_{k-3})\Pr(x_{k-1} / x_{k-3}, x_{k-2})\Pr(x_k / x_{k-2}, x_{k-1})$ " without underlining.
- (aaa) Claim 30: "second-order" was changed to "second order" without strikethrough.
- (bbb) Claim 31: "UTR" was changed to "UTRs" without underlining.
- (ccc) Claim 32: "zero-order" was changed to "zero order" without a strikethrough.
- (ddd) Claim 33: in line 1 the colon was deleted without a strikethrough.
- (eee) Claim 33: "end" in "5' end" was added but not underlined.
- (fff) Claim 33: "beginning" was deleted but not indicated by a strikethrough.
- (ggg) Claim 34: "Claim 33" was changed to "claim 33" without a strikethrough or underlining.
- (hhh) Claim 36: "thymine rich region" was changed to "thymine region" but not indicated by a strikethrough.
- (iii) Claim 37: "thymine rich region" was changed to "thymine region" but not indicated by a strikethrough.
- (jjj) Claim 38: "thymine rich region" was changed to "thymine region" but not indicated by a strikethrough.
- (kkk) Claim 39: "rich" in "adenine rich" was added but not underlined.
- (lll) Claim 39, the colon after "wherein" was deleted without a strikethrough.
- (mmm) Claim 40: "of" in "5' of" was added but not underlined.
- (nnn) Claim 40: "site" was added to the end of the claim but not underlined.
- (ooo) Claim 41: " $\Pr(h=k|x)$ " was changed to " $\Pr(h=k/x)$ " without underlining.
- (ppp) Claim 42: " $\Pr(h=k|x)$ " was changed to " $\Pr(h=k/x)$ " without underlining.
- (qqq) Claim 42: " $\Pr(x|h=k)$ " was changed to " $\Pr(x/h=k)$ " without underlining.
- (rrr) Claim 43: " $\Pr(h=k|x)$ " was changed to " $\Pr(h=k/x)$ " without underlining.

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- (sss) Claim 43: " $\Pr(x_{k-5}, \dots, x_k | h=k)$ " was changed to " $\Pr(x_{k-5}, \dots, x_k / h=k)$ " without underlining.
- (ttt) Claim 43: " $\Pr(x_{k-5}, \dots, x_k | h=k)$ " was changed to " $\Pr(x_{k-5}, \dots, x_k / h=k)$ " without underlining.
- (uuu) Claim 43: "at position k" was changed to "at the position k" without underlining.
- (vvv) Claim 43: "observing the hexamer given" was changed to "observing the hexamer" without a strikethrough.
- (www) Claim 43: "a" was changed to "the" without a strikethrough or underlining.
- (xxx) Claim 45: " $\Pr(x_{k-5}, \dots, x_k | h=k)$ " was changed to " $\Pr(x_{k-5}, \dots, x_k / h=k)$ " without underlining.
- (yyy) Claim 45: "a" was changed to "the" without a strikethrough or underlining.
- (zzz) Claim 45: "order" was deleted without a strikethrough.
- (aaaa) Claim 46: " $\Pr(x_{k-5}, \dots, x_k | h \neq k) = \Pr(x_{k-5})\Pr(x_{k-4} | x_{k-5})\Pr(x_{k-3} | x_{k-5}, x_{k-4})\Pr(x_{k-2} | x_{k-4}, x_{k-3})\Pr(x_{k-1} | x_{k-3}, x_{k-2})\Pr(x_k | x_{k-2}, x_{k-1})$ " was changed to " $\Pr(x_{k-5}, \dots, x_k / h \neq k) = \Pr(x_{k-5})\Pr(x_{k-4} / x_{k-5})\Pr(x_{k-3} / x_{k-5}, x_{k-4})\Pr(x_{k-2} / x_{k-4}, x_{k-3})\Pr(x_{k-1} / x_{k-3}, x_{k-2})\Pr(x_k / x_{k-2}, x_{k-1})$ " without underlining.
- (bbbb) Claim 47: "UTR" was changed to "UTRs" without underlining.
- (cccc) Claim 48: "zero-order" was changed to "zero order" without a strikethrough.

See 37 CFR 1.111. Since the above-mentioned reply appears to be *bona fide*, applicant is given **ONE (1) MONTH or THIRTY (30) DAYS** from the mailing date of this notice, whichever is longer, within which to supply the omission or correction in order to avoid abandonment. EXTENSIONS OF THIS TIME PERIOD MAY BE GRANTED UNDER 37 CFR 1.136(a).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James Martinell whose telephone number is (571) 272-0719. The fax phone number for Examiner Martinell's desktop workstation is (571) 273-0719. Only documents such as those intended for

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use in a personal or telephone interview should be faxed to the examiner's desktop workstation. Any Official Communication to the USPTO should be faxed to (571) 273-8300.

The examiner works a flexible schedule and can be reached by phone and voice mail. Alternatively, a request for a return telephone call may be e-mailed to [james.martinell@uspto.gov](mailto:james.martinell@uspto.gov). Since e-mail communications may not be secure, it is suggested that information in such requests be limited to name, phone number, and the best time to return the call.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Jones, can be reached on (571) 272-0745.

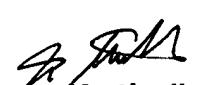
#### OFFICIAL FAX NUMBER

The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300. Any Official Communication to the USPTO should be faxed to this number.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to (571) 272-0547.

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For all other customer support, please call the USPTO Call Center (UCC) at 800-786-9199.

  
**James Martinell, Ph.D.**  
**Primary Examiner**  
**Art Unit 1634**

8/28/05